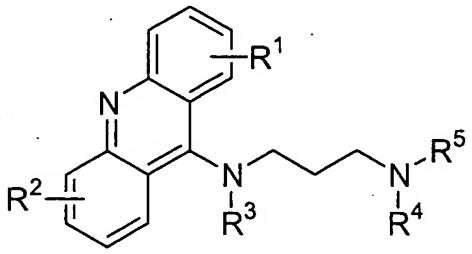
We claim:

1. A method of treating an autoimmune or hyperplasic disease in a mammal, comprising administering to the mammal a therapeutically effective amount of a compound of the formula:



where:

R^1 and R^2 are independently selected from hydrogen, halogen, hydroxy, optionally substituted alkyl, optionally substituted alkyloxy, -NRR′ (where R is hydrogen or alkyl and R′ is hydrogen, alkyl, or aryl), and optionally substituted aryl; and

R_3, R_4, and R_5 are independently selected from hydrogen, optionally substituted alkyl, optionally substituted aryl, optionally substituted alkylcarbonyl, and optionally substituted arylcarbonyl,

as a single stereoisomer or mixture of stereoisomers,

or a pharmaceutically acceptable salt thereof.

2. The method of claim 1, where R^1 and R^2 are hydrogen.

3. The method of claim 2, where R^3 is hydrogen.

4. The method of claim 3, where R^4 and R^5 are alkyl.

5. The method of claim 4, where the compound is 9-[(3-diethylaminopropyl)amino]acridine or a pharmaceutically acceptable salt thereof.

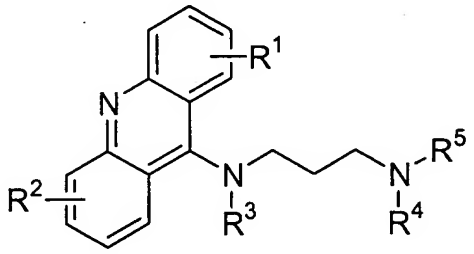
6. The method of claim 1, where the disease is an autoimmune disease.

7. The method of claim 1, where the disease is a hyperplasic disease.

8. The method of claim 1, where the disease is autoimmune lymphoproliferative syndrome, autoimmune thyroid disease, or hypereosinophilia.

9. The method of claim 1, further comprising treating said mammal with an additional form of therapy for said disease state.

10. A method of stimulating Fas-mediated apoptosis in a cell having a Fas receptor, comprising contacting the cell with a compound of the formula:



where:

R^1 and R^2 are independently selected from hydrogen, halogen, hydroxy, optionally substituted alkyl, optionally substituted alkyloxy, -NRR′ (where R is hydrogen or alkyl and R′ is hydrogen, alkyl, or aryl), and optionally substituted aryl; and

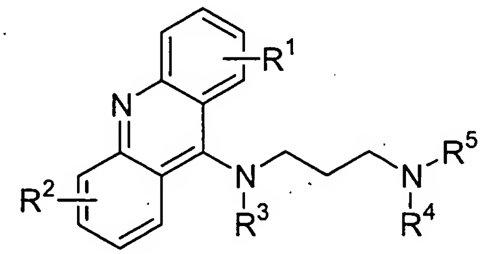
R_3, R_4, and R_5 are independently selected from hydrogen, optionally substituted alkyl, optionally substituted aryl, optionally substituted alkylcarbonyl, and optionally substituted arylcarbonyl,

as a single stereoisomer or mixture of stereoisomers,

or a pharmaceutically acceptable salt thereof,

in an amount sufficient to stimulate Fas-mediated apoptosis.

11. A method for obtaining and/or developing a compound that has at least one desired function selected from the group of stimulating the Fas receptor and stimulating Fas-mediated apoptosis, the process comprising administering a standard compound of the formula:



where:

R^1 and R^2 are independently selected from hydrogen, halogen, hydroxy, optionally substituted alkyl, optionally substituted alkyloxy, -NRR′ (where R is hydrogen or alkyl and R′ is hydrogen, alkyl, or aryl), and optionally substituted aryl; and

R_3, R_4, and R_5 are independently selected from hydrogen, optionally substituted alkyl, optionally substituted aryl, optionally substituted alkylcarbonyl, and optionally substituted arylcarbonyl, as a single stereoisomer or mixture of stereoisomers,

or a pharmaceutically acceptable salt thereof, to an assay of Fas binding or of Fas-mediated apoptosis and noting a first result, administering a test compound to the assay and noting a second result, and comparing the first and second results, whereby a test compound producing results similar to or better than the results obtained with the standard compound has the desired function.